# Minutes of the 126 Meeting of the Water Management Board Floyd Matthew Training Center 523 East Capitol Avenue Pierre, South Dakota

December 4, 2002

<u>CALL TO ORDER:</u> Chairman Dwayne Rollag called the meeting to order at 8:30 a.m. CST. A quorum was present.

The following were present at the meeting.

<u>Board Members:</u> Dwayne Rollag, Rodney Freeman, Leo Holzbauer, Marian Gunderson, and Bernita Loucks. Francis Brink was absent.

<u>Department of Environment & Natural Resources (DENR):</u> Garland Erbele, Eric Gronlund, Ken Buhler, Don Stroup, Stacy Johnson, Karen Schlaak, Genny McMath, Jim Goodman, Ron Duvall, Mark Rath, Gale Selken, and Lynn Beck, Water Rights Program; Jeanne Goodman, Patrick Snyder, Stacy Reed, and Kelli Buscher, Surface Water Program

Attorney General's Office: John Guhin, Diane Best, and Charles McGuigan

<u>Legislative Oversight Committee:</u> Representative Tom Hansen, Huron

Surface Water Quality Rules Hearing: Ron Utteht, Woonsocket

Water Permit No. 6173-3: Mr. and Mrs. Paul Meyers, Aberdeen

Water Permit No. 2471B-3: Denis Slepikas and Craig Slepikas, Huron

Water Permit No. 1775-1: Alan Sarver, Rapid City

Water Permit No. 6362-3: Jeff DeVille, Watertown

<u>Water Permit No. 1769-1:</u> DuWayne Mahlen, Rapid City; Johnson Holy Rock, John Mousseau, and John Yellow Bird Steele, Pine Ridge; Harvey White Woman, Kyle; Faith Taken Alive and Shirley Marvin, McLaughlin; Joseph Red Cloud, Chadron, NE; Scott King and William Latecnesse, Los Angeles, CA

Water Right No. 970-3: Bill St. Clair, Tulare; Kevin Dettler, Doland; and James Hare, Redfield

Water Permit No. 6341-3: Jeffery Gatzke, Hitchcock

Water Permits from Tulare: Westem Spink & Tulare: Hitchcock Aquifer: Floyd Peterson, Brad Peterson, Lenny Peterson, and Danny Peterson, Hitchcock; Lee Gatzke, Tulare; Allen Gatzke, Hitchcock; Darin Binger and Chad Binger, Tulare

Other: Francis Eagle, Waubay and Pat Cerny, Burke

<u>APPROVE SEPTEMBER 25, 2002 MINUTES:</u> Motion by Loucks, seconded by Holzbauer, to approve the minutes from the September 25, 2002, Water Management Board meeting. Motion carried.

MARCH 5-6,2003 BOARD MEETING: The next meeting will be March 5 and 6, 2003, in the Matthew Training Center in Pierre.

<u>STATUS AND REVIEW OF WATER RIGHTS LITIGATION:</u> Mr. Guhin stated that there are no cases in litigation at this time.

<u>ADMINISTER OATH TO DENR STAFF:</u> Chairman Rollag administered the oath to the DENR staff members who intended to testify during the board meeting.

<u>PUBLIC HEARING TO CONSIDER AMENDMENT TO SURFACE WATER QUALITY</u>
<u>STANDARD RULES:</u> Chairman Rollag opened the hearing at 8:45 a.m. CST.

The purpose of the hearing was to consider an amendment to ARSD 74:51:03:20, Uses Assigned to Streams.

The effect of the purposed amendment is the addition of warm water marginal fish life propagation waters and limited contact recreation waters beneficial uses to a segment of Moccasin Creek in Brown County that currently is assigned the beneficial uses of fish and wildlife propagation, recreation and stock watering waters and irrigation waters.

The adding of warm water marginal fish life propagation waters and limited contact waters uses is the result of a stream analysis required by the South Dakota Surface Water Quality Standards Section 74:51:01:02. This section requires a beneficial use analysis be performed on streams that are currently classified only as fish and wildlife propagation, recreation, and stock watering waters and are receiving, or are proposed to receive, a permitted discharge. If states do not properly designate beneficial uses of streams, the Federal Clean Water Act gives the U.S. Environmental Protection Agency the authority to adopt and apply water quality standards to state streams.

The public hearing was advertised in accordance with the applicable rules and regulations. No written comments were received from the public.

The Legislative Research Counsel reviewed and approved the proposed amendments for style, form and legality.

Patrick Snyder provided a presentation discussing the analysis of Moccasin Creek and explaining the purpose of the proposed amendment. Additions are indicated by underscores and deletions are indicated by overstrikes.

**74:51:03:20. James River and certain tributaries' uses.** Stream segments of the James River and certain tributaries covered by § 74:51:03:02 include the following:

Water Body	From	То	Beneficial Uses	County
James River	Missouri River	Huron Third Street Dam	5,8	Beadle
James River	Huron Third Street Dam	James River Diversion Dam	1,5,8	Beadle
James River	James River Diversion Dam	North Dakota border	5,8	Brown
Beaver Creek	James River	Beaver Lake	6,8	Yankton
Cain Creek	James River	S33, T1z0N, T63W of the fifth principal meridian	6,8	Beadle
Dawson Creek	James River	Lake Scotland	6,8	Bon Homme
Elm River	James River	North Dakota border	1,5,8	Brown
Maple River	Elm River	North Dakota border	1,5,8	Brown
Enemy Creek	James River	S18, T102N, R60W	6,8	Davison
North Fork Enemy Creek	Enemy Creek	S36, T103N, R61W	6,8	Davison
Firesteel Creek	James River	confluence with West Fork Firesteel Creek	1,4,8	Davison
Firesteel Creek	confluence West Fork Firesteel Creek	S.D. Highway 34	1,5,8	Jerauld
West Fork Firesteel Creek	Firesteel Creek	Wilmarth Lake	1,6,8	Aurora
Foster Creek	James River	S6, TI 14N, R60W	6,8	Spink
North Fork Foster Creek	James River	U.S. Highway 212	6,8	Spink
Jim Creek	James River	S19, T106N, R59W	6,8	Sanborn
Johnson Creek	James River	Fulton Dam	6,8	Hanson
Lonetree Creek	James River	S31, T98N, R58W	6,8	Hutchinson
Moms Creek, also known as Dry Run Creek	James River	S10, T104N, R61W	6,8	Davison
Moccasin Creek	James River	<del>\$474</del> 24, <del>T4,n</del> 123N, R64W	6,8	Brown
Mud Creek (Brown and Spink Counties)	James River	S.D. Highway 37	6,8	Brown

Water Body	From	То	Beneficial Uses	County
Mud Creek (Yankton County)	James River	S.D. Highway 46	6,8	Yankton
Pearl Creek	James River	S8, T109N, R60W	6,8	Beadle
Pierre Creek	James River	S11, T102N, R58W	5,8	Hanson
Plum Creek	James River	S30, T100N, R58W	6,8	Hutchinson
Redstone Creek	James River	S14, T107N, R60W	6,8	Sanborn
Rock Creek	James River	S9, T103N, R59W	6,8	Hanson
Sand Creek	James River	S32, T110N, R66W	5,8	Hand
Snake Creek	James River	confluence with South Fork Snake Creek	5,8	Spink
Snake Creek	confluence with the South Fork Snake Creek	S26, T124N, R66W	6,8	Edmunds
South Fork Snake Creek	confluence with Snake Creek	S23, T1 18N, R70W	6,8	Faulk
Shue Creek	James River	S23, TI 12N, R60W	6,8	Beadle
Turtle Creek	James River	S17, Ti ON, R65W	6,8	Beadle
Timber Creek	James River	S31, T1 18N, R61W	6,8	Spink
Twelve Mile Creek	James River	S11, T101N, R60W	6,8	Davison
South Fork Twelve Mile Creek	Twelve Mile Creek	S 12, T100N, R61W	6,8	Hutchinson
Willow Creek	Elm River	S31, T126N, R65W	1,6,8	Brown
Wolf Creek (Spink and Hand Counties)	Turtle Creek	S10, T114N, R66W	6,8	Hand
Wolf Creek (Hutchinson, McCook, and Hanson Counties)	James River	S5, T103N, R56W	6,8	McCook

**Source:** SL 1975, ch 16, § 1; 4 SDR 32, effective December 4, 1977; 6 SDR 59, effective December 16, 1979; transferred from § 34:04:04:19, effective July 1, 1979; 10 SDR 145, effective July 4, 1984; 13 SDR 129, 13 SDR 141, effective July 1, 1987; 14 SDR 86, effective December 24, 1987; 19 SDR 111, effective January 31, 1993; transferred from § 74:03:04:19, July 1, 1996, 24 SDR 10, effective July 20, 1997.

General Authority: SDCL 34A-2-93.

**Law Implemented:** SDCL 34A-2-10, 34A-2-11.

Following Mr. Snyder's presentation, Chairman Rollag requested public comment. No one provided comments on the proposed amendment.

Mr. Snyder answered questions from Paul Meyers, Aberdeen, regarding the different types of stream classifications.

Motion by Freeman, seconded by Gunderson, to adopt the proposed amendment to 74:51:03:20, as presented. Motion carried.

Chairman Rollag declared the hearing closed.

<u>AGENDA CHANGES:</u> Eric Gronlund reported that consideration of a well driller's license for Howie Construction and consideration of new water permit application No. 2487-2, Dave Snyder, are continued until the March board meeting.

Ms. Best asked the board to appoint a pre-hearing chairman for water permit application No. 2487-2. Mr. Freeman volunteered to be the pre-hearing chairman for this matter.

AMEND QUALIFICATIONS TO VESTED RIGHT NO. 6173-3, DAVID AESOPH: Ron Duvall reported that in August 1999, Don Weiss filed a complaint concerning a dam, on property owned by David Aesoph, that was backing up water onto his property. The dam is located about 25 miles northeast of Highmore. When he inspected the dam, Mr. Duvall found that the spillway elevation had been raised. Based on the investigation, the department issued an Order to Mr. Aesoph to lower the spillway elevation. Mr. Aesoph was not willing to lower the spillway elevation. The Order also stated that Mr. Aesoph should apply for a vested water right or lose his ability to do so within 90 days if he chose not to. Mr. Aesoph filed a vested right claim in January 2000 for the entire storage capacity of the dam.

In January 2000, the Water Management Board held hearing and determined that Mr. Aesoph was entitled to a vested water right, but only to the extent as to what storage capacity existed in 1950. The board validated the vested right claim subject to several qualifications. Mr. Aesoph did not comply with the qualifications, so another hearing took place. The board suspended the vested right for one year beginning on July 12, 2001, due to failure to comply with all of the qualifications. The suspension automatically expired on July 12, 2002.

During the year of suspension, Paul Meyers acquired the property and lowered the water level behind the dam to address upstream flooding issues.

In September 2002, Mr. Duvall and Tim Schaal conducted an inspection of the work that Mr. Meyers had completed. The inspection found that the 18-inch culvert, which was installed in 2001, had been replaced with a 24-inch culvert. The elevation of the culvert had been lowered to the approximate 1950 elevation. Mr. Duvall noted that Clark Engineering completed a survey referencing the new spillway elevation to the NW corner Section 19, TI 16N-R70W.

The water level was below the culvert through the section line road upstream, which separates the Meyers property from the Wiess property. The old section line road is out of the water now.

As a result of the inspection, the chief engineer recommended the following amendments and deletions to the qualifications for Vested Right No. 6173-3.

- Vested Water Right No. 6173-3 authorizes a dam with a storage capacity at the spillway of 42 acre-feet of water and sufficient water annually to maintain the water level to the 1950 spillway overflow elevation.
- 2. The spillway overflow elevation shall be lowered and maintained at an elevation of 1863.66 feet mean sea level. (see Certificate of Survey dated October 4, 2002). which will not allow the permanent storage capacity of the impoundment to exceed 42 acre feet of water or inundate trees along either the sides or across the neck of the dam at the location denoted as a black line on the 1950 topographical map attached to the DENR report.
- 3. A permanent benchmark shall be established near the dam to allow the lowered spillway elevation to be referenced. The location of the permanent benchmark shall be identified on a map by direction and distance from a corner of a government survey section or quarter section. This map shall be no smaller than 8 by 11 inches and be prepared by a South Dakota licensed land surveyor, a South Dakota registered professional engineer, or a government employee who regularly prepares maps as part of their employment.
- 4. Plans and specifications shall be prepared by an engineer in accordance with the safety of dams requirements and submitted to the Water Rights Program for approval prior to beginning work to lower the spillway. The plans and specifications shall be submitted within 30 days of the date Vested Water Right No. 6173-3 is issued.
- Construction to lower the spillway elevation shall commence within 30 days after receiving Water Rights Program approval of plans and specifications provided runoff conditions allow the work to be performed.
- The lowering of the dam's water level shall be completed without causing damage to downstream property.
- The lowered spillway overflow elevation shall be surveyed in reference to the permanent benchmark and a copy of the survey notes provided to the Water Rights Program.
- § 3. The chief engineer or his authorized staff shall be allowed to enter upon the lands where the dam is located for the purpose of inspecting the dam and surveying to verify the spillway overflow elevation. The chief engineer shall make a reasonable attempt to notify the owner or possessor of the property prior to entry upon the land.

Mr. Duvall noted that transfer of ownership from Mr. Aesoph to Mr. Meyers will be completed administratively.

Motion by Freeman, seconded by Gunderson, to amend the qualifications contained in Vested Right No. 6173-3, as recommended by the chief engineer. Motion carried.

CONSIDER 10-YEAR REVIEW OF WATER PERMIT NO. 2471B-3, BUELL AND CRAIG SLEPIKAS: Eric Gronlund reported that on November 1, 2002, notice was sent to Craig and Buell Slepikas regarding the 10-year review of Water Permit No. 2471B-3.

Water Permit No. 2471B-3 was considered and approved by the Water Management Board in 1992. It is located approximately nine miles north of Huron in Beadle County. The permit adds an additional diversion point and increases the diversion rate by 1.55 cfs to what was authorized by Water Right No. 2471-3. The original permit and an amendment to that permit had appropriated 1.33 cfs from one well in the Hitchcock Management Unit of the Tulare Aquifer to irrigate 202 acres. Permit No. 2471B-3 authorizes an increase in the diversion rate 1.33 cfs to 2.88 cfs without increasing the historical annual volume of water pumped of 240 acre-feet.

At the hearing, there was considerable discussion on the application about the decline in the aquifer that had occurred in the past years. The question wasn't whether the new withdrawals were going to exceed recharge from that aquifer, but focused entirely on the decline of water in the area. In 1992, the hydrographs show a continued trend of the water in the aquifer going down.

At the hearing, Mr. Slepikas stated that because of the sandy soil, he needed a higher diversion rate. Ultimately, the application was approved for a 10-year period to monitor water levels of the aquifer. The increased diversion rate received a 1992 priority date. The permit was approved with the Well Interference Qualification, Well Construction Rule Qualification No. 2, the Irrigation Water Use Questionnaire Qualification, and the following qualifications:

- 1. Permit No. 2471B-3 is approved as authorized by SDCL 46-1-14, for a 10-year period. The Water Management Board at the end of the 10-year period may: 1) continue the permit for a second 10-year period, 2) approve as a permanent permit, or 3) cancel the permit because of unlawful impairment of prior water rights or unlawful impairment of the supply of water in the Tulare-Hitchcock Aquifer in Beadle County following a public hearing before the Water Management Board.
  - If during the first 10-year period the annual authorized pumped volume of 240 acre-feet is exceeded, Permit No. 2471B-3 may be cancelled following a hearing before the Water Management Board.
- 2. A water meter with a readily accessible read out must be installed at the well sites and an hour meter must be installed at the electrical switch box supplying power to the system. Records must be kept for the meters and reported on the annual irrigation water use questionnaire.
- 3. Approval of Permit No. 2471B-3 limits the annual volume of water diverted to 240 acre-feet of water annually to irrigate 202 acres authorized by Water Right No. 2471-3. Permit No. 2471B-3 authorizes an increase in the diversion rate 1.33 cfs to 2.88 cfs without increasing the historical annual volume of water pumped of 240 acre-feet. The total amount of water applied may not exceed 14.28 inches per

year. At a pumping rate of 2.88 cfs, the pumping time may not exceed 1,008 hours per year (42 days continuous pumping).

Mr. Gronlund noted that this permit was recently inspected by staff engineer, Stacy Johnson, who found that 202 acres were being irrigated and that the works were capable of diverting the 2.88 cfs, as permitted.

Mr. Gronlund stated that this permit was brought before the board in accordance with Qualification No. 1. The applicant was provided notice of today's hearing and information was requested for him to provide the water and electric meter readings. Mr. Slepikas provided the meter readings from the electrical switch board, which shows that since 1992, the pumping time has been below the 1,008 hours per year.

Mr. Gronlund said Mr. Slepikas has submitted all of his irrigation questionnaires in the past. Although Mr. Slepikas has kept records of the meter readings, he has not reported the meter readings on the irrigation questionnaires. Mr. Gronlund said he doesn't see this as a problem since Mr. Slepikas has been keeping records. Mr. Slepikas has not exceeded the pumping rate or the 1,008 hours per year.

The chief engineer recommended approval of Permit No. 2471B-3 as a permanent permit and that Qualification No. 1 be removed.

Motion by Freeman, seconded by Gunderson, to approve Permit No. 2471B-3 as a permanent permit and to remove Qualification No. 1. Motion carried.

<u>NEW WATER PERMIT APPLICATIONS:</u> The pertinent qualifications attached to approved water permit applications throughout the hearings are listed below:

#### Well Interference Qualification

The well(s) approved under this permit will be located near domestic wells and other wells which may obtain water from the same aquifer. The well owner under this Permit shall control his withdrawals so there is not a reduction of needed water supplies in adequate domestic wells or in adequate wells having prior water rights.

#### Well Construction Rule Qualification No. 1

The well(s) authorized by Permit No. shall be constructed by a licensed well driller and construction shall comply with Water Management Board Well Construction Rules, Chapter 74:02:04 with the well casing pressure grouted (bottom to top) from the producing formation to the surface pursuant to Section 74:02:04:28.

#### Well Construction Rule Qualification No. 2

The well(s) authorized by Permit No. shall be constructed by a licensed well driller and construction shall comply with Water Management Board Well Construction Rules, Chapter 74:02:04 with the well casing pressure grouted (bottom to top) pursuant to Section 74:02:04:28.

#### <u>Irrigation Water Use Ouestionnaire Qualification</u>

This permit is approved subject to the irrigation water use questionnaire being submitted each year.

#### **Low Flow Qualification**

Low flows as needed for downstream domestic use, including livestock water and prior water rights must be-by-passed.

<u>UNOPPOSED NEW WATER PERMITS ISSUED BY THE CHIEF ENGINEER WITHOUT A HEARING BEFORE THE BOARD:</u> See attachment.

<u>WATER PERMIT APPLICATION NO. 1775-1, ALBEN INC.</u>: Ken Buhler presented his report on the application.

The application proposes to appropriate five gallons per minute (0.011 cfs) from one well 40 feet deep in Meade County. The water is for commercial use.

Mr. Buhler reported that a well completion report is not available for this well. The well was probably completed into the Pierre shale, the Fox Hills Formation, or terrace deposits of sand and gravel that overlie the shale. The shale is fractured and weathered and there is thin sand in the shale, which is probably where the water is coming from. Monitoring well information indicates that in some places there is sand and gravel laying on the shale. The water levels in the monitoring wells are almost always below the sand and gravel layers. The water level in this well is 16 feet below grade.

There are several domestic wells in this area that rely on the Pierre shale and/or the terrace deposits for water. There are two water permits or rights appropriating water in this area. Mr. Buhler indicated that any influence this proposed use would have on existing water rights is not expected to be adverse.

Mr. Buhler noted that the department received a letter of intervention from Andrew Thompson on September 9, 2002. A copy of the letter is attached to Mr. Buhler's report. Mr. Thompson was not present at the board meeting.

The chief engineer recommended approval of Application No. 1775-1 with the Well Interference Qualification.

Alan Sarver, Alben Inc. requested board approval of the water permit. He said the water will be used for flushing toilets and periodically washing trucks.

Motion by Freeman, seconded by Holzbauer, to approve Water Permit Application No. 1775-1, Alben, Inc. with the Well Interference Qualification. Motion carried.

<u>WATER PERMIT APPLICATION NO. 6355-3, JASON HASKELL:</u> Don Stroup presented his report on the application.

The application proposes to appropriate 0.089 cfs (40 gpm) from the Elm River to irrigate 10 acres of wildflower production plots. The period of annual use is from March 1 to October 31. Water will be withdrawn at two diversion points approximately one mile upstream from the city of Aberdeen's water treatment plant. The Elm River is a tributary of the James River in Brown County.

Data from a US Geological Survey (USGS) stream flow gauge twelve miles upstream of the proposed diversion point shows a 50% probability that the flow in Elm River could be in the 5 to 50 cfs range or greater for the period of March through October. There is a 75% probability that the flow in Elm River at the same location could be in the 3 to 9 cfs range or greater for the same period. Mr. Stroup noted that a hydrograph is included in the report.

The city of Aberdeen holds prior Water Right Nos. 3009-3 and 5571-3 for total withdrawal of 29.7 cfs of water from the Elm River natural flow and storage dams. The city also holds Future Use Permit No. 3428-3 for 10,426 acre-feet of Elm River, Elm Lake or Willow Lake stored water.

USGS historical stream flow data shows that the Elm River cannot be considered a reliable source of water for the city of Aberdeen and this proposed project during extended periods of diminished precipitation. In August 2002, Aberdeen's public works director and water superintendent, along with Jason Haskell were advised of these conclusions.

Mr. Stroup noted that the proposed project was presented to and approved by the Aberdeen city council on September 3, 2002.

The chief engineer recommended approval of Application No. 6355-3 as a temporary permit with the Low Flow Qualification, the Irrigation Water Use Questionnaire Qualification and the following qualifications:

- 1. Diversion of water under Permit No. 6355-3 is subject to the city of Aberdeen's existing prior water rights. Diversions by the permit holder may not impair existing prior rights and shall comply with any written orders issued by the chief engineer.
- 2. The city of Aberdeen has senior priority right to water from the Elm River under existing water rights and a future use withdrawal permit. Permit No. 6355-3 is issued as a temporary permit pursuant to SDCL 46-5-39 and will be subject to Aberdeen's prior rights if the city develops the reserved water supply. This permit may be subject to cancellation if the city puts to beneficial use water reserved by their future use permits. Prior to cancellation, the chief engineer must provide the permit holder six months notice.

Motion by Gunderson, seconded by Freeman, to approve Water Permit Application No. 6355-3, Jason Haskell, subject to the qualifications set forth by the chief engineer. Motion carried.

<u>WATER PERMIT APPLICATION NO. 2490-2, DENNIS HULLINGER:</u> Mr. Stroup presented his report on the application.

The application proposes to appropriate 0.83 cfs (120 gpm) of water from the Cheyenne River to irrigate a total-of 58.2 acres. The period of annual use is from June 1 to August 31.

The water source is the Cheyenne River approximately 32 miles downstream of Angostura Dam in Fall River County. Angostura Dam is part of the Angostura Unit irrigation system, which was completed in 1949. The Bureau of Reclamation holds Water Right No. US5792 for an annual one-time fill of 138,761 acre-feet of water stored in the Angostura Reservoir for irrigation of 12,218 acres and for fish, wildlife, recreation, and other purposes. Since October 1949 the flow in the Cheyenne River downstream of Angostura Dam has been regulated primarily to serve the irrigation needs of the Angostura Irrigation District.

The flows in the Cheyenne River, both above and below the Angostura Reservoir, are normally low with occasional high flows occurring during spring snow melt and periodic rain storms. During a severe drought in the upper Cheyenne River basin, water rights along this reach of the river could be subject to shutoff orders by the chief engineer.

Mr. Stroup reported that below Angostura Dam, about 3.3 cfs of leakage occurs into the Cheyenne River. In the irrigation district it is estimated that 54% of the amount of water released to the main canal or about 30 cfs is returned back to the river downstream of the dam to east of Buffalo Gap.

Approximately two river miles below the dam, the Fall River joins with the Cheyenne River. Fall River is fed by thermal springs and wells and basically has a steady flow. The steady flow, from Fall River, return water flows from the irrigation district, and flow from other tributaries have fulfilled the state water rights and domestic water use downstream of the Fall and Cheyenne River's confluence.

Mr. Stroup reported that in 2002 the Bureau of Reclamation prepared an Environmental Impact Statement (EIS) in conjunction with renewal of the Angostura Irrigation District contract. The EIS analyzed the impacts of four alternatives: 1) No action, 2) Re-establishment of natural flows below Angostura Dam, 3) Improved efficiencies in the irrigation district's system, and 4) Reservoir recreation and fisheries. Improved efficiencies was selected as the preferred alternative for the management of Angostura Dam and the irrigation district. This alternative within the irrigation district includes measures such as lining the canals and laterals, putting laterals into pipes, improving water measuring devices, leveling fields, irrigation by gated pipe or sprinkler, etc. with estimated water saving increases of 5% for the delivery system and 10% for on-farm efficiency. Although the flows from the irrigation district will lessen, a 10% on-farm efficiency improvement would not be expected to significantly change the Cheyenne River's flow rates during the normal irrigation season.

Mr. Stroup noted that the USGS maintains stream flow gauging stations at Buffalo Gap, Red Shirt, and Wasta. The flows are shown in Mr. Stroup's report as Tables 2, 3 and 4. The presumption can be made that the stream flow rates recorded at the cited gauging stations are post withdrawal of the majority of those water right allocations upstream of the gauge's location during the normal irrigation season.

There are 12 water rights with diversions totaling 38.49 cfs from the Fall and Cheyenne River's confluence to this proposed project's location. Downstream of the proposed project's location to Red Shirt, there are seven water rights with diversions totaling 14.72 cfs. From Red Shirt to Wasta there are eight water rights with diversions totaling 22.35 cfs.

Mr. Stroup stated that except during severe drought conditions in the upper Cheyenne River basin, historical USGS stream flow data indicates this project's proposed allocation of 0.83 cfs of water should not adversely impact any of the present water rights or domestic water use along the reach of the Cheyenne River from Angostura Dam to Wasta.

The chief engineer recommended approval of Water Permit Application No. 2490-2 with the Irrigation Water Use Questionnaire Qualification and the following qualification:

Low flows as needed for downstream domestic use, including livestock water and prior water rights must be bypassed. This permit does not authorize diversion of water from the Cheyenne River at any time when the river flow is low, unless written orders have been issued by the chief engineer. Diversions under this permit shall be in accordance with any written orders issued by the chief engineer.

John Guhin stated that he was involved in discussions on the Angostura Environmental Impact Statement, so he would not be involved in the board discussion on this matter.

Motion by Gunderson, seconded by Holzbauer, to approve Water Permit Application No. 2490-2, Dennis Hullinger subject to the qualifications set forth by the chief engineer. Motion carried.

<u>WATER PERMIT APPLICATION NO. 6342-3, IVAN SJOVALL:</u> Jim Goodman presented his report on the application.

The application proposes to appropriate 0.324 cfs (146 gpm) from seven wells approximately 190 feet deep in Marshall County. The water is for commercial use in an existing livestock confinement operation.

The aquifer is the Pierre Shale, which is not typically thought of an aquifer in South Dakota. In this area, the shale is very close to the land surface. There are also glacial deposits overlying the shale. Mr. Goodman said he believes a lot of the water is getting into the shale through some of the sands that are close to the surface. He noted that only one well log is available for this facility.

Observation well ML-77A is about 11 miles southwest of this application. Water levels for this well show good response to climatic conditions. A hydrograph for this well is included in the report.

Mr. Goodman said there are not other water permits/rights in this area so interference is not a concern.

The chief engineer recommended approval of Water Permit Application No. 6342-3 with the Well Interference Qualification and the following qualifications:

- 1. Permit No. 6342-3 will be subject to compliance with requirements of the Department's General Water Pollution Control Permit for concentrated animal feeding operations.
- 2. Permit No. 6342-3 is subject to compliance with all existing and applicable Water Management Board Rules including but not limited to:
  - a) Chapter 74:54:01 Ground Water Quality Standards,
  - b) Chapter 74:54:02 Ground Water Discharge Permit,
  - c) Chapter 74:51:01 Surface Water Quality Standards,
  - d) Chapter 74:51:02 Uses Assigned to Lakes,
  - e) Chapter 74:51:03 Uses Assigned to Streams, and
  - f) Chapter 74:52:01 through 74:52:11 Surface Water Discharge Provisions.

Mr. Goodman noted that the plans and specifications for this facility have been reviewed and approved by the department.

Motion by Freeman, seconded by Gunderson, to approve Water Permit Application No. 6342-3, Ivan Sjovall subject to the qualifications set forth by the chief engineer. Motion carried.

<u>WATER PERMIT APPLICATION NO. 6358-3, MICHAEL AND NANCY JOHNSON:</u> Mr. Goodman presented his report on the application.

The application proposes to appropriate 0.122 cfs (55 gpm) from five existing wells in Grant County. The water is for commercial use in a cattle-feeding operation.

The Veblen aquifer is a predominantly buried glacial outwash (sand and gravel) which is under artesian conditions over most of Grant County. The aquifer underlies approximately 260 square miles and contains approximately 700,000 acre-feet of water in storage in Grant County. The groundwater movement in this area is to the east and toward the Whetstone River.

Mr. Goodman stated that other than the location, very little information is available concerning the construction or depth of the wells for this application.

The Water Rights Program monitors three observation wells within a two mile radius of this application. Water levels for these wells show good response to climatic conditions. Hdyrographs for these wells are included in the report. The water level record indicates that he aquifer is capable of sustaining additional withdrawals.

There is an existing irrigation well located less than one half mile to the east of this application. Interference is not a concern. Mr. Goodman noted that these are all existing wells and have been in use for years with no apparent problems.

Mr. Goodman stated that the facility is in the process of applying for coverage under the South Dakota General Water Pollution Control Permit for Concentrated Animal Feeding Operations. The water permit application is the first step in this process.

The chief engineer recommended approval of Water Permit Application No. 6358-3 with the Well Interference Qualification and the following qualifications:

- 1. Permit No. 6358-3 will be subject to compliance with requirements of the Department's General Water Pollution Control Permit for concentrated animal feeding operations.
- 2. Permit No. 6358-3 is subject to compliance with all existing and applicable Water Management Board Rules including but not limited to:
  - a) Chapter 74:54:01 Ground Water Quality Standards,
  - b) Chapter 74:54:02 Ground Water Discharge Permit,
  - c) Chapter 74:51:01 Surface Water Quality Standards,
  - d) Chapter 74:51:02 Uses Assigned to Lakes,
  - e) Chapter 74:51:03 Uses Assigned to Streams, and
  - f) Chapter 74:52:01 through 74:52:11 Surface Water Discharge Provisions.

Motion by Gunderson, seconded by Holzbauer, to approve Water Permit Application No. 6358-3, Michael and Nancy Johnson subject to the qualifications set forth by the chief engineer. Motion carried.

<u>WATER PERMIT APPLICATION NO. 6362-3, RODNEY ZEMLICKA:</u> Mr. Goodman presented his report on the application.

The application proposes to irrigate an additional 100 acres. Water Right No. 5262-3 appropriates 2.22 cfs from two wells approximately 44 and 53 feet deep to irrigate 165 acres in Codington County. This new application is to irrigate an additional 100 acres from the existing wells. There will be no increase in the developed diversion rate of 2.22 cfs.

The aquifer is the Big Sioux North. The Big Sioux is a surficial outwash (sand and gravel) which is under water table conditions. The entire aquifer underlies about 150 square miles and contains an estimated 350,000 acre-feet of water in storage in Codington and Grant Counties.

The Big Sioux North aquifer (management unit of the entire Big Sioux aquifer) underlies 67,300 acres and contains an estimated 151,430 acre-feet of recoverable water in storage in Codington County.

Recharge to the Big Sioux aquifer is estimated to be 5.53 inches per year. A recharge rate of 5.53 inches equates to a total recharge of 5,760 acre-feet per year from the aquifer area of about 12,500 acres. This recharge is larger than the estimate of 4,200 acre-feet used in the report on Water Permit Application No. 5862-3 for the city of Watertown. That application was a future use for the city that was approved for 3,700 acre-feet per year with the remainder of the application, 2,575 acre-feet, deferred for further study.

Mr. Goodman stated that the new calculations indicate that 1,560 acre-feet of additional water could be allocated to the city of Watertown, leaving about 1,015 acre-feet remaining in deferred status.

Hydrographs from four area observation wells are included in Mr. Goodman's report. Water levels for these wells shows good response to climatic conditions. The water level record indicates that the aquifer is capable of sustaining additional withdrawals.

The chief engineer recommended approval of Application No. 6362-3 as a temporary permit with the Well Interference Qualification, the Irrigation Water Use Questionnaire Qualification and the following qualification:

The city of Watertown has priority right to this water under future use withdrawal permits. This permit is issued as a temporary permit pursuant to SDCL 46-5-39 and is subject to Watertown's prior rights if or when the city develops the reserve water supply. This permit may be subject to cancellation when the city puts to beneficial use water reserved by their future use permit. The chief engineer must provide the permit holder six months notice prior to cancellation of this temporary permit.

Mr. Goodman noted that Mr. Zemlicka is in favor the permit being issued as a temporary permit. Prior to the hearing, the department received a letter from Jeff DeVille, water superintendent for the city of Watertown indicating that the city wished to be a party in this matter.

Jeff DeVille was administered the oath by Chairman Rollag and testified that the city supports issuing a temporary permit. He noted that the city is growing and intends to develop that area sometime in the future.

Motion by Loucks, seconded by Gunderson, to approve Water Permit Application No. 6362-3, Rodney Zemlicka as a temporary permit subject to the qualifications set forth by the chief engineer. Motion carried.

<u>CANCELLATION CONSIDERATIONS</u>: Eric Gronlund reported that seven rights/permits were scheduled for cancellation. The right/permit owners on the cancellation list were notified of the hearing and the reasons for cancellation. No letters in opposition to the cancellation were received.

The following were recommended for cancellation for the reasons listed.

Water Permit No. 1492-1 filed by Two Rivers Ranch, Inc.; abandonment/forfeiture Water Right No. 72-2 filed by Oluf Johnson, now owned by Mark Sanders; abandonment/forfeiture

Water Right No. 550-2 filed by Kirby L. Briggs, now owned by Lillian and Cole Briggs; abandonment/forfeiture

Water Permit No. 2133-2 filed by Two Rivers Ranch, Inc.; abandonment/forfeiture Water Right No. 1606-3 filed by McCook Lake Recreation Association; abandonment Water Right No. 3583A-3 filed by Douglas Bochman; abandonment/forfeiture Water Permit No. 4565-3 filed by McCook Lake Recreation Association; abandonment

Motion by Freeman, seconded by Gunderson, to cancel the seven water rights/permits for the reasons listed. Motion carried.

<u>VALIDATION OF RECOGNIZED VESTED WATER RIGHT CLAIM NO. 965-1, TRAVIS MADSEN:</u> Mr. Gronlund stated that this vested right claim was filed in 1972 in the name of Everett Madsen. Vested Water Right Claim No. 965-1 is for 0.93 cfs from a dam to irrigate 65 acres northeast of New Underwood in Meade County. The priority date for this claim is January 1, 1949.

A notice was published in Meade County Times Tribune in 1988. At that time only the chief engineer filed a petition in opposition. The petition was for the purpose of the department conducting an on-site investigation. Tim Schaal conducted the investigation in 2001, and found the system in place as it was originally claimed.

The chief engineer recommended validation of this vested water right claim for 0.93 cfs to irrigate 65 acres, with a priority date of January 1, 1949. Mr. Gronlund noted that this claim was transferred from Everett Madsen to Travis Madsen.

Motion by Gunderson, seconded by Holzbauer, to validate Vested Water Right Claim 965-1, Travis Madsen, for 0.93 cfs to irrigate 65 acres, with a priority date of January 1, 1949. Motion carried.

<u>WATER PERMIT APPLICATION NO. 1769-1, DUWAYNE MAHLEN:</u> A court reporter was present for this hearing and a transcript of the proceedings was prepared. To obtain a copy of the transcript contact Capital Reporting Services at (605)224-7611. The original transcript and exhibits are on file at the Department of Environment and Natural Resources, Water Rights Program.

Water Permit Application No. 1769-1 proposes to appropriate 4.33 cfs from a spring, and from seven dugouts. The application proposes to irrigate 264 acres and to divert 0.56 cfs from the spring and dugouts for a sand and gravel washing operation.

The chief engineer recommended approval of the application for a total appropriation of 4.33 cfs to irrigate 264 acres and commercial use in a sand and gravel washing operation with the Irrigation Water Use Questionnaire Qualification and the following qualification:

Water Permit No. 1769-1 authorizes 264 acres of irrigation. This permit allows the irrigated acres to be moved to the different quarters as described in the permit, however, no more than 264 acres may be irrigated annually.

Motion by Freeman, seconded by Loucks, to approve Water Permit Application No. 1769-1, DuWayne L. Mahlen, Sr. for a total appropriation of 4.33 cfs to irrigate 264 acres and commercial use in a sand and gravel washing operation subject to the qualifications set forth by the chief engineer. Motion carried.

#### CANCELLATION OF A PORTION OF WATER RIGHT NO. 970-3, WILLIAM ST. CLAIR:

Diane Best said this hearing is to consider cancellation of a portion of a water permit based on abandonment and forfeiture. A complaint was made with respect to the new use of a water right. The staff investigation showed that a water right existed, but it had not been used for a number of years. Mr. St. Clair started using the water right again this year.

Ms. Best stated that revival of a water right does not keep that water right from being canceled. If it has not been used for three or more years without legal excuse or if the water right has been relinquished or abandoned, it needs to be canceled.

Ms. Best provided the board with a copy of the forfeiture and abandonment statutes and Mr. Gronlund's report.

Ms. Best offered Exhibit 1, DENR's file on Water Right No. 970-3; Exhibit 2, a map of the area; and Exhibit 3, a general location map. The exhibits were accepted into the record.

Eric Gronlund stated that the Water Rights Program conducted an investigation of whether a portion of Water Right No. 970-3 has been forfeited for nonuse. The water right is located about four miles west and two miles north of Doland in Spink County. He pointed out the location on Exhibit 3. He noted that the area marked in red is the area the board will be considering at today's hearing. The areas marked in green are owned by William St. Clair and the areas marked in purple are other neighboring water rights.

In July 2002, the Water Rights Program received three telephone complaints regarding a recently constructed irrigation system in the NE <sup>1</sup>/<sub>4</sub> of Section 29, T117N, R61W.

Water Permit Application No. 970-3 was filed in March 1962 to appropriate 5.58 cfs from three wells to irrigate 391 acres located in the N %2 of Section 29 and the N %2 of the SW 7/4 of Section 28. The water source is the East James Management Unit of the Tulare Aquifer.

In 1973, Burton Jones, a Water Rights staff person, conducted a licensing investigation of this water right. The investigation found two wells located in the N  $_{\%2}$  of Section 29 had been developed to irrigate 312 acres in the N  $_{\%2}$  of Section 29. The irrigation in Section 28 was never

developed. The works at that time were capable of placing to beneficial use 3.88 cfs. The report of examination of works (included in Exhibit 1) states that the system used to apply water to beneficial use were four one-quarter of a mile long tow lines. Also, 1,320 feet of gated pipe were used to irrigate approximately 100 acres of leveled land.

The water right was issued in 1973 for 3.88 cfs from two wells to irrigate 312 acres. The water right specified 156 acres being irrigated in each quarter.

Mr. Gronlund reported that after receiving the telephone complaints, Don Stroup, engineer with the Water Rights Program, drove to the area on July 10, 2002, to verify that a pivot was located on the NE 1/4 of Section 29. He found that a pivot was located in the NE' of Section 29 and also made note of other irrigation systems in the same vicinity.

On July 12, 2002, Garland Erbele, Jim Goodman, and Mr. Gronlund called Mr. St. Clair to discuss the water right. Mr. St. Clair indicated that he had constructed a new well and installed a pivot in the NE '/4 of Section 29. Mr. St. Clair did not have a full recollection of the history of irrigation on this land because Jim Freeburg, the prior renter for a number of years, is now deceased. Mr. St. Clair lives about 40 miles away from this area, and currently leases this land to Kevin Dettler. Mr. Gronlund noted that during the July 12 telephone call, Water Rights staff informed Mr. St. Clair of the statutes regarding forfeiture for nonuse.

Mr. Gronlund said he reviewed the orthographic map of Section 29 to see if irrigation was taking place. This map, based on a 1997 flight, shows that center pivot irrigation was not occurring in the NE '/4 Section 29. Mr. Gronlund said staff also contacted the local Farm Services Agency and learned that from 1991 to 1995 and 1997 to 2001 no irrigation was reported in the NE '/4 of Section 29. Staff also reviewed the annual irrigation questionnaires submitted by Mr. St. Clair and determined that no irrigation took place in the NE 1/4 of Section 29 since at least 1985. During that time, irrigation was reported in the NW '/4 of Section 29. Mr. Gronlund noted that the original water right included both the NW '/4 and the NE '/4 of Section 29.

Mr. Gronlund stated that the water source is the Tulare:East James Aquifer. The Water Management Board has made the determination that the Tulare:East James is a fully appropriated aquifer based on pumping records and use from the aquifer. Mr. Gronlund noted that the board most recently denied a permit in March 2002 from this aquifer.

Mr. Gronlund read the following into the record:

SDCL 46-5-37 - When any person entitled to the use of appropriated water fails to use beneficially all or any part of such water for the purpose for which it was appropriation, for a period of three years, such unused water shall revert to the public and shall be regarded as unappropriated public water.

ARSD 74:02:01:37 - A water permit, right or vested right in invalid if it meets one or more of the following conditions:

- 1) The necessary works were not constructed or the water put to beneficial use within the time limits as provided by statute;
- 2) Use of water has been abandoned as specified in SDCL 46-5-36;
- 3) Use of water has been forfeited for nonuse as specified in SDCL 46-5-37

Mr. Gronlund stated that the Notice of Hearing on the cancellation of a portion of this water right was sent to Mr. St. Clair and Mr. Dettler on August 26, 2002. This notice scheduled a September 25, 2002, hearing before the Water Management Board.

Mr. St. Clair submitted a letter stating the he intended to oppose the cancellation and requesting a delay of the hearing due to a scheduling conflict. A notice was sent to Mr. St. Clair rescheduling the hearing for December 4, 2002.

The chief engineer recommended that Water Right No. 970-3 be reissued to reflect the irrigation system in the NW <sup>17</sup>/<sub>4</sub> of Section 29, T117N, R61W. The well and irrigation of NE <sup>1</sup>/<sub>4</sub> of Section 29 and the non-irrigated acres in the NW <sup>1</sup>/<sub>4</sub> of Section 29 are cancelled and deleted from Water Right No. 970-3 based on forfeiture for nonuse.

Mr. Gronlund noted that if the Water Management Board adopts the recommendation, Water Right No. 970-3 will be reissued to appropriate 1.78 cfs (800 gpm) from one well located near the center of the NW <sup>1</sup>/<sub>4</sub> Section 29 to irrigate 132 acres located in the NW <sup>1</sup>/<sub>4</sub> Section 29; all in T117N, R61 W.

James Hare, attorney for Mr. St. Clair and Mr. Dettler, stated that his clients do not dispute any of the information presented by the state with regard to reports, maps, etc. He stated that the two issues are 1) whether the amount of acres that can be irrigated in the NE 1/4 will be reduced; and 2) if the amount of acres to be irrigated is reduced, will the amount of water that is authorized to be used also be reduced.

Mr. Hare stated that this land has been in the St. Clair family for over 100 years. In the 1960's when the permits and licenses were applied for, they were both gravity systems. In 1970, Mr. St. Clair installed a center pivot on the NW  $^{1/4}$ . The NE  $^{1/4}$  is not conducive to putting in a fully circle center pivot, so that was not done. Mr. Hare said his clients are not disputing the fact that the NE  $^{1/4}$  was not being irrigated.

Mr. Hare stated that in 2002, Mr. St. Clair and Mr. Dettler decided to install a portion of the pivot in the NE '/4. He said about 70 acres of the quarter was irrigated in 2002. The cost of the irrigation system for this area was about \$40,000. Mr. Hare said Mr. St. Clair called Pierre and was told that if no one complained it would not be a problem. So Mr. St. Clair installed the pivot system, then someone complained.

Mr. Hare read the following into the record:

ARSD 74:02:01:37.01 - Legal excuse for nonuse of water. Legal excuse for nonuse of water suspends the period of nonuse specified in SDCL 46-5-37. Legal excuses for nonuse of water include but are not limited to the following:

- (1) Unavailability of water to satisfy a permit, right, or vested right;
- (2) Legal proceedings which prevent the use of water;
- (3) Water use under existing climatic conditions would result in a waste of water.

Mr. Hare said his clients want to address 74:02:01:37.01 (3) and the fact that the board is not limited to these three legal excuses. Mr. St. Clair and Mr. Dettler have been good conservationists with regard to water. Mr. Hare said Mr. St. Clair's permits authorize much more water than they have been actually using. The equipment they are using is conservation oriented. With regard to 74:02:01:37.01 (3), Mr. Hare asked that the board find that legal excuse does exist with regard to forfeiting this license because under any type of climatic conditions, the gravity system would not work and would fall under the definition of (3). In the early 1960's and 1970's most people didn't know this system was not suitable for South Dakota. If the board does not find that, Mr. Hare asked that they find legal excuse occurs due to the fact that the applicant is now using any more water than he was authorized to use.

Mr. Hare said from a conservation aspect and from an economical aspect Mr. St. Clair and Mr. Dettler are being damaged severely due to the fact that they were being honest, they were providing the reports, and accurately documenting how much water they used. When they asked questions, the state gave them good information. But after the new system was installed, someone complained and caused this hearing to take place. He asked the board not to take away the right to irrigate those 70 to 80 acres in the NE '/4 of Section 29.

William St. Clair was administered the oath by Chairman Rollag. Responding to questions from Mr. Hare, Mr. St. Clair stated that he obtained Water Permit No. 970-3 in 1962. At that time he installed a 157-acre system, a well and pump with a motor, and about 7,500 feet of surface pipe with % mile of 6" mainline and four 1/4 mile laterals. The pump was rated to put out 206 feet of head at 55 pounds per square inch and 1,136 gallons per minute. The surface pipe was removed in 1970 and a center pivot system was installed. Mr. St. Clair said the original pumping plant was used until this last spring. The historical water use is about 1,200 gallons per minute.

Mr. St. Clair said he intended to use the well to pump onto the NE <sup>1</sup>/4, but instead decided to install a new well in the NE <sup>1</sup>/4. The configuration of the field was not suitable for anything other than gravity. The Spink County Soil Survey engineered a gravity project with gated pipe. The next several years were spent trying to get the water down the rows. Mr. St. Clair the gates were set for 100 gpm per gate and water would run for 10 hours and still not advance more than 250 feet down the field. He stated that gravity irrigation is a waste of water. Mr. St. Clair stated that the first center pivot was installed on the NW <sup>1</sup>/4 in 1970.

Mr. St. Clair said a used system that irrigates a % circle was installed in the NE '/4 in the spring of 2002. He stated that he and Kevin Dettler both talked to Water Rights Program staff prior to installing the system. Mr. St. Clair said he was told that if no one complained, there probably would not be a problem with irrigation the NE '/4.

Mr. St. Clair said the irrigation questionnaires reflect that there had been no irrigation on the NE <sup>1</sup>/<sub>4</sub> for many three-year periods. No one ever challenged the validity of that permit in any way until the system was installed. Mr. St. Clair stated that he is not going to use any more acre-feet of water that he was before.

Responding to questions from Diane Best, Mr. St. Clair stated that he and Mr. Detteler both called the Water Rights Program before the system was installed. Mr. St. Clair said he irrigated about seven acres in the NE 1/4 of Section 29. Except for those seven acres, Mr. St. Clair did not irrigate the NE 1/4 at any time from 1985 to 2001.

Mr. Best asked if from 1986 to 1996, Mr. St. Clair used 1,000 gpm on 132 acres in the NW 1/4. Mr. St. Clair answered that he reported using 1,000 gpm, but that is not accurate. He stated that in the future he will report the correct amount of water used.

Kevin Dettler was administered the oath by Chairman Rollag. He testified that he has been Mr. St. Clair's tenant for about eight years and 2002 is the third year he has farmed the north half of Section 29. Mr. Dettler said he irrigated about 70 acres in the NE '/4 in 2002. Mr. Dettler said he talked to the Water Rights Program before installing the system and learned that Mr. St. Clair's permit is for 3.88 cfs (1,750 gpm) to irrigate 312 acres. Mr. Dettler said all the center pivots were converted to low pressure pumps to reduce the amount of water being pumped from the aquifer.

Responding to questions from Ms. Best, Eric Gronlund stated that he cannot remember talking to Mr. St. Clair on the telephone in the spring of 2002. He did talk to Mr. Dettler on April 12, 2002, about Mr. St. Clair's water rights. Mr. Gronlund stated that when people call him for information on the status of a water right, he first cites the statutes for nonuse of the water. He noted that Water Rights staff cannot speak to the validity of a water right.

Responding to a question from Ms. Best, Mr. Gronlund said he did not tell Mr. St. Clair or Mr. Dettler that they still held a valid water right or that they held a water right unless someone complained.

Mr. Hare asked Mr. Gronlund whether the state reviews the yearly irrigation questionnaire reports as far as usage on portions of land. Mr. Gronlund answered that the state uses the information on the report to manage the water. The reports are not used for the purpose of checking up on whether someone has hit that three-year period of nonuse.

Mr. Hare asked Mr. Gronlund if the state would be able to tell whether or not a portion of land is being irrigated by reviewing the information provided on the yearly irrigation questionnaire. Mr. Gronlund answered that in most instances that would be true. He said if a permit is for one quarter, the questionnaire will reflect 132 acres irrigated. Some water rights are for up to 640 acres. If the landowner reports that he irrigated 320 acres, the staff does not know which quarters those irrigated acres are unless it is included in the report.

Responding to a question from Ms. Best, Mr. Gronlund stated that Mr. St. Clair's irrigation questionnaires showed that had been no irrigation on the NE %4 of Section 29 for several years.

Mr. St. Clair stated that the NE '/4 has always been reported under Permit No. 987-3. It was only reported under Permit No. 970-3 in 2001. He said No. 987-3 disappeared from his reporting schedule, then it reappeared again in 2002.

Chairman Rollag asked whether Mr. St. Clair can apply for a new permit for this area.

Mr. Gronlund stated that the aquifer is fully appropriated. Full appropriation is determined by using pumping records submitted in the irrigation questionnaires.

Ms. Best asked if there is more than one permit for the NE  $_{64}$  of Section 29. Mr. Gronlund said the only permit in the NE '/4 of Section 29 is 970-3. Permit No. 987-3 is for the SW '/4 of Section 20.

Mr. St. Clair said No. 987-3 is being reported as the NW '/4 of Section 29.

Chairman Rollag asked what would happen if Mr. St. Clair agreed to cut the other by 400 gpm.

Mr. Gronlund stated that if Mr. St. Clair wants to do that, he needs to follow the procedure to transfer the diversion authority.

Jim Goodman said he talked to Mr. St. Clair after the Water Rights Program received the complaint. Mr. Goodman did not give Mr. St. Clair any indication that the permit was still valid. Mr. Goodman outlined the procedure the Water Rights staff follows when they receive a request for information on a water right.

Ms. Best and Mr. Hare offered closing statements.

Motion by Freeman, seconded by Loucks, to adopt the recommendation of the chief engineer and reissue Water Right No. 970-3 to appropriate 1.88 cfs for the irrigation of 132 acres in the NW 1/4 of Section 29, T117N, R61W. The well and irrigation of the NE 1/4 of Section 29 and the non-irrigated lands in the NW '/4 of Section are cancelled and deleted from Water Right No. 970-3 based on forfeiture for nonuse. Motion carried.

Chairman Rollag asked Mr. Guhin to prepare the Findings of Fact, Conclusions of Law and Final Decision.

<u>WATER PERMIT APPLICATION NO. 6341-3, JEFFREY GATZKE:</u> Jim Goodman presented his report on the application.

The application proposes to appropriate 1.78 cfs (800 gpm) from a well approximately 60 feet deep in the Tulare East James aquifer to irrigate 132 acres in Spink County. Water Right No. 4753-3 authorizes 1.88 cfs from one well to irrigate 262 acres. Mr. Goodman noted that approval of this application would allow both pivots to run simultaneously.

The Water Management Board has determined that the Tulare East James aquifer is fully appropriated. The board has denied new permits from this aquifer and in this area.

Mr. Goodman noted that the applicant holds the two existing water rights that are located in this area.

Mr. Goodman stated that even though this application requests an additional point of diversion and it will allow two center pivots to run simultaneously, new water would be appropriated by approval of the application.

The chief engineer recommended denial of the application because the aquifer is fully appropriated.

Jeffrey Gatzke was administered the oath by Chairman Rollag. He testified that he will not use any more water than he does now.

Mr. Freeman asked if the board could approve the permit with the condition that Mr. Gatzke does not use any more water than is now appropriated.

Motion by Freeman, seconded by Gunderson, to defer the application until March 2003 to allow Mr. Gatzke time to show he will not increase the amount of water historically applied to the land. Motion carried.

FINDINGS OF FACT, CONCLUSIONS OF LAW AND FINAL DECISION FOR FLOOD CONTROL PERMIT APPLICATION NO. FC-32, LAKE PELICAN WATER PROJECT DISTRICT: John Guhin presented his proposed Findings of Fact and Conclusions of Law. The only objections received were from the city of Watertown. The city objected to Finding of Fact Nos. 7, 8, and 13. The city also objected to Conclusions of Law Nos. 2, 3, and 4. Mr. Guhin recommended that board reject the city of Watertown's objections.

Motion by Freeman, seconded by Gunderson, to reject the city of Watertown's objections and to adopt the Findings of Fact, Conclusions of Law and Final Decision, as presented by Mr. Guhin. Motion carried.

CONSIDER TWENTY-ONE APPLICATIONS FROM THE TULARE:HITCHCOCK AND TULARE:WESTERN SPINK AQUIFER: Mr. Goodman presented his report on Water Permit Nos. 6330-3, 6331-3, 6332-3, 6336-3, 6337-3, 6338-3, 6339-3, 6340-3, 6343-3, 6344-3, 6345-3, 6346-3, 6348-3, 6353-3 from the Tulare:Hitchcock Aquifer and Water Permit Nos. 6333-3, 6334-3, 6347-3, 6351-3, 6352-3 from Tulare:Westem Spink Aquifer.

These applications are all for irrigation and propose to appropriate 62.87 cfs for the irrigation of 4,604.4 acres in Beadle and Spink Counties. The applications request 45.85 cfs for irrigation of 3,397 acres from the Tulare Hitchcock aquifer and 17.02 cfs for irrigation of 1,207.4 acres from the Tulare Western Spink aquifer.

Mr. Goodman provided a map showing the Tulare Western Spink and the Tulare Hitchcock management units. The management unit was put in place because the aquifer converted from a situation where it was under water table conditions to where it was under artesian conditions. The boundary line between the two management units follows a line from Hitchcock to Tulare. Everything east of the line is Tulare Hitchcock and everything west of the line is Tulare Western Spink. The Water Rights Program has continued to use the management units for water use and water allocation purposes. Mr. Goodman stated that because of the similarities between the aquifer management units and because of continuing irrigation development from both management units, the management units need to be combined to fully utilize the development potential of the aquifer.

Mr. Goodman stated that combining the two management units and considering them as one unit indicates a total recharge of about 19,960 acre-feet annually. Based on water use plus estimates for undeveloped permits, there is about 3,400 acre-feet of water available for appropriation from the combined management units. This volume would allow about 2,500 acres of additional irrigation.

Mr. Goodman presented the board with a chart listing the pending water permit applications from the Tulare:Western Spink and Tulare:Hitchcock aquifers. The applications are listed in order of the date the Water Rights Program received them. Mr. Goodman noted that during the last couple years the board has approved about 12 permits which are not yet developed. Mr. Goodman considered those permits along with the new applications listed on the chart.

Mr. Goodman noted that his report contains hydrographs for four observation wells in the area. These hydrographs are representative of the whole Tulare Western Spink and Tulare Hitchcock aquifer areas.

The chief engineer recommended approval of the following Applications: 6330-3, Floyd Peterson; 6331-3 and 6332-3, Oscar, Inc.; 6333-3 and 6334-3, Peterson Farms; 6336-3, Lee Gatzke; 6337-3, Brian Gatzke; 6338-3, 6339-3, and 6340-3, Allen Gatzke; and 6343-3 Peterson Farms.

Mr. Goodman stated that the Tulare Hitchcock and Tulare Western Spink management units of the Tulare aquifer should be declared fully appropriated and no additional permits from the aquifer should be considered until abandonment or forfeiture of existing rights, non development of a recently approved water permit, or additional information becomes available on the recharge rate to the aquifer.

Lee Gatzke stated that he is in the Tulare Western Spink management unit. There are two wells pumping and has never run out of water. He said there are springs in that area. As soon as the wells were shut off in September, the springs were running. And the springs started running about  $v_2$  mile from one of the permits the chief engineer recommended for denial. Mr. Gatzke said he has dug test holes since submitting the applications. These are good formations and the recovery rate is very good. Mr. Gatzke said the board should approve permits for all the applicants on the list today and not approve any more in the future.

Mr. Holzbauer asked if the applications recommended for denial are in priority. Mr. Goodman said the Water Rights Program does not feel that the statute allows them to do that because it would be like a future use permit for a municipality or other governmental entity. Mr. Goodman said the individual that makes the application is entitled to a decision. If the board decides the application needs to be deferred for more study, this generally means that in a year or two a decision will be made. Deferring the applications on the bet that something is going to happen 20 years from now is not appropriate.

Mr. Freeman said the board has recently approved 12 permits located in Spink and Beadle counties that have not been fully developed, so the board could defer denial of the other 11 applications for five years.

Allen Gatzke said he called the Water Rights Program before he sent in his permit application. He asked what the chances of the permits being approved were if the recovery rate on the test wells was back up. Mr. Gatzke said he called later this fall to find out exactly what the recover rate was, and he told the recovery rate came back up right away.

Ms. Gunderson said the board has to be careful not to approve permits where water may not be available.

Mr. Goodman said the limiting factor the average annual recharge rate. The Water Rights Program has estimated the recharge rate at about .83 inches per year. The hydrographs show that the climate affects this aquifer more than the pumping.

John Guhin read SDCL 46-6-3.1 - "No application to appropriate ground water may be approved if according to the best information reasonable available it is probable that the quantity of water withdrawn annually from a ground water source will exceed the quantity of average estimated annual recharge of water to the ground water source."

Lee Gatzke was administered the oath by Chairman Rollag. Mr. Gatzke said he doesn't understand why it is not possible to let everyone have some water.

Board discussion took place.

Motion by Freeman, seconded by Gunderson, to approve the following applications subject to the qualifications set forth by the chief engineer: 6330-3, Floyd Peterson; 6331-3 and 6332-3, Oscar, Inc.; 6333-3 and 6334-3, Peterson Farms; 6336-3, Lee Gatzke; 6337-3, Brian Gatzke; 6338-3, 6339-3, and 6340-3, Allen Gatzke; and 6343-3 Peterson Farms. Motion carried.

Motion by Freeman, seconded by Gunderson, to defer the following applications for a period not to exceed five years: 6344-3, 6345-3, 6346-3, and 6347-3, Oscar, Inc.; 6348-3, Allen Gatzke; 6351-3, Randy Puffer; 6352-3 and 6353-3, Lee Gatzke; and 6359-3, 6360-3, and 6361-3, Darin, Brett & Chad Binger. If water becomes available within the five-year period, the board will consider the deferred applications in the order in which they are listed on the chart. Motion carried.

ADJOURN: Chairman Rollag declared the meeting adjourned at 5:00 p.m.

A court reporter was present for this meeting and a transcript of the proceedings may be obtained by contacting Capital Reporting Services, PO Box 903, Pierre, SD 57501; telephone number 605-224-7611.

The meeting was also tape recorded and duplicate cassette tapes may be obtained by contacting the Department of Environment and Natural Resources, 523 East Capitol Avenue, Pierre, SD 57501; telephone number 605-773-3886.

Approved this 5<sup>h</sup> day of March, 2003.

Dwayne Rollag, Chairman

Bernita Loucks, Secretary

### WATER MANAGEMENT BOARD MEETING December 4, 2002

#### **Qualifications:**

wi - well interference wer -well construction rules iq - irrigation questionnaire

if - <u>low</u> <u>flow</u>

## **Unopposed New Water Permit Applications Issued Based on the Chief Engineer Recommendations**

No.	Name	Address	County	Amount	Use	source	Qualifications
1776-1	Robert A Christofferson	Spearfish	LA	0.67 cfs	141.2 acres	well-Minnelusa Formation	wi, wcr, iq
1777-1	Valhalla Addition	Sturgis	LA	0.07 cfs 0.222 cfs	SHD	2 wells-Madison Formation	wi, wer, 1 special
2484-2	Pine Grove Comm.Water	Rapid City	PE	0.222 cfs	SHD	well-Madison Aquifer	wi, 1 special
2486-2	Camp Bob Marshall	Custer	CU	0.011 cfs	institutional	1 well-Precambrian	wi
2488-2	B & V Thompson Ranch	Oral	FR	37.6 AF	FWP	runoff	If, 1 special
5997A-3	Wynstone Develop. Corp.	N Sioux City	UN	1.11 cfs	SHD	2 wells-Dakota Formation	wi
5998A-3	Wynstone Develop. Corp.	N Sioux City	UN	2.22 cfs	SHD	l well-Missouri:Elk Point	wi
6349-3	Ronald W. Marone	Cavour	BD	1.66 cfs	116 acres	2 wells-Floyd East James Aqu	wi, wcr, iq
6350-3	Town of Rosholt	Rosholt	RB	0.98 cfs	municipal	2 wells-Fairmont Aquifer	wi, 1 special
6354-3	City of Vermillion	Vermillion	CL	0.022 cfs	municipal	1 well-Missouri:Elk Point	none
6356-3	Oscar Wenholm	Raymond	CK	2.14 cfs	150 acres	l well-Altamont Aquifer	wi, wcr, iq,l special
6357-3	Dept Game Fish & Parks	Pierre	DA	0.89 cfs	FWP	Blue Dog Lake	none
6363-3	Hillside Colony	Doland	SP	0.44 cfs	10 acres	Foster Creek	If, iq, 2 special
6366-3	Mark Amundson, Sutton	Sioux Falls	SU	100 acre-ft	fwp, rec.	runoff & Missouri River	If, 2 special
	Bav						